

*All children will  
learn, grow and  
develop to realize  
their full potential.*

# The Parents as Teachers program: its impact on school readiness and later school achievement

## *A Research Summary*

Based on a report<sup>1</sup> by:

Judy Pfannenstiel, M.A., President and Senior Research Associate,  
Research & Training Associates, Inc.

Edward Zigler, Ph.D., Sterling Professor of Psychology, Emeritus,  
Yale University



Parents as Teachers  
national center

Schools, communities and families all share the common goal of wanting children to succeed in school. Being a competent reader by third grade is one key indicator of children's academic success. Children who do well in the early grades of elementary school are more likely to graduate from high school and to go on to be successful in life.<sup>2</sup>

How can we increase the likelihood that children will do well in elementary school? Research shows that school readiness predicts later school achievement. **Therefore, we should provide positive experiences for children, starting at birth or earlier, that maximize school readiness.**

Since education begins at home and parents are their children's first and most influential teachers, supporting and educating parents is a logical strategy. Parents who are involved in their children's early care and education have children who are better prepared for school. The Parents as Teachers *Born to Learn*<sup>TM</sup> program is one key way to ensure that children enter school ready to learn.<sup>3</sup>

This research summary reports results from a 2006 study of Missouri children who participated in Parents as Teachers and other early childhood experiences. Researchers investigated the impact of pre-kindergarten services on 7,710 Missouri children's readiness for school and performance on state assessments at the end of the early elementary years.

## Key Findings

Participation in Parents as Teachers predicts children's school readiness and third grade achievement, regardless of income level.

- Parents in the Parents as Teachers program read more frequently to their young children and were more likely to enroll their children in preschool, both of which were positively linked to school readiness and later school achievement.
- A large percentage (82%) of poor children who participated with high intensity in both Parents as Teachers and preschool entered kindergarten ready to learn, as compared to only 64% of poor children who had no involvement in either service. A similar pattern emerged for more affluent children (93% vs. 81%).
- At third grade, 88% of poor children who participated with high intensity in both Parents as Teachers and preschool reached a benchmark level of performance on the Missouri Assessment Program (MAP) Communication Arts test, as compared to 77% of poor children who had no involvement in either service. Here again, the pattern of results was similar for more affluent children (97% vs. 93%).

In addition, Parents as Teachers combined with preschool shows promise for narrowing the much-discussed achievement gap between low income students and more affluent students.

- For poor children, high intensity Parents as Teachers and preschool participation appears to narrow the achievement gap at kindergarten entry and third grade. Eighty-two percent of these poor children were ready for kindergarten, as compared to 81% of their more affluent peers with no preschool experience or Parents as Teachers participation. At third grade, a similar pattern emerged (88% vs. 93%).

# Participants and Study Design

This study involved public school students from a stratified random sample of Missouri districts and schools who entered kindergarten between 1998 and 2000. Of 9,410 kindergartners assessed at school entry, 82% were matched to the third-grade MAP state assessment in Communication Arts, yielding a combined sample of 7,710 children who were assessed at kindergarten entry and again in third grade.

A secondary analysis of two existing multi-year data sets—the Missouri School Entry Assessment data and the MAP state assessment data—was used to examine the impact of pre-kindergarten services, including the Parents as Teachers program, on the school readiness and later school success of children in the early elementary years. Path analysis was used to test and support a causal model that predicts that Parents as Teachers has both direct and indirect effects on school readiness and third grade achievement.

## Measures

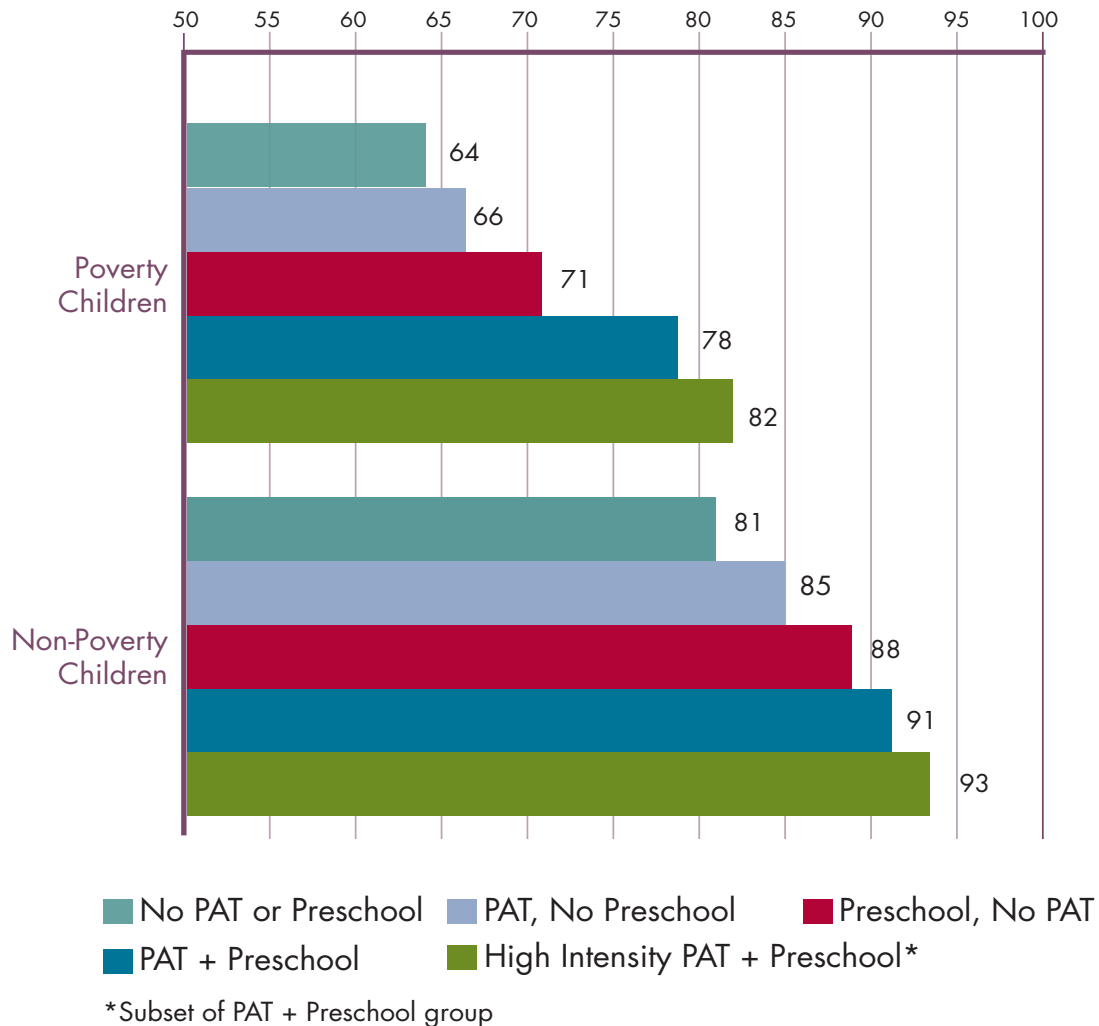
Children's preparation for kindergarten was assessed by their kindergarten teachers using a 65-item School Entry Profile. The School Entry Profile reflects areas of performance and skills appropriate to kindergarten entry that are observable within the first six to eight weeks of school. Teachers used a three-point scale—almost always, occasionally/sometimes, and not yet/almost never—to measure (1) symbolic development, (2) communication, (3) working with others, (4) mathematical/physical knowledge, and (5) learning to learn. They scored items yes or no in (6) physical development and (7) conventional knowledge. To maintain consistency, the teachers focused on one domain at a time, rating all children in their class on those items before proceeding to the next domain. Because of high inter-correlations among the seven scales, the ratings were summed to form an overall school readiness score with high reliability.

The MAP is a standardized performance-based assessment system used by all public schools in the state. The data reported here are from the MAP Communication Arts test given to all public school third graders in the spring of each year.

Parents completed a survey about their children's health issues, preschool attendance and home literacy activities prior to kindergarten entry. Parents reported whether, and the number of years, children had participated in a number of preschool experiences, including Parents as Teachers, First Steps, Early Childhood Special Education, Early Head Start, Head Start, public preschool, private preschool, center-based child care, child care in own home, child care in other private home, and remained at home with parent. Parents reported on how often someone in the home read to the child and how often their child read or looked at books.

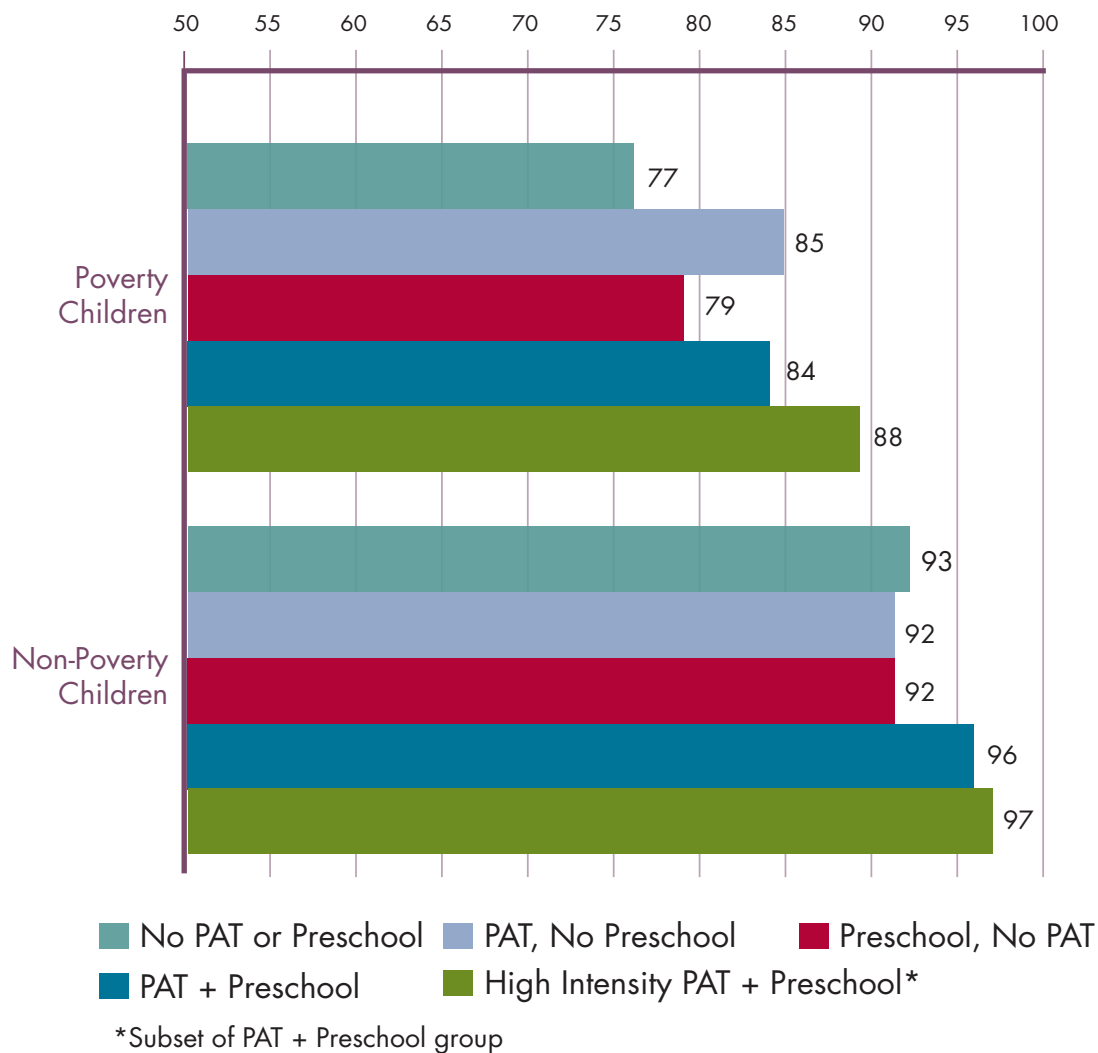
The figures show the impact of Parents as Teachers (PAT) and preschool participation on children's school readiness and later success. For this study, children assessed as "not ready" for kindergarten scored one standard deviation below the average entering kindergartner. Children scoring at the lowest level on the third grade MAP Communication Arts test scored one standard deviation below the average third grader.

**Figure 1. Percentage of Children Entering Kindergarten "Ready" by Poverty Status and Pre-K Experiences**



The graph illustrates that increasing percentages of both poverty and non-poverty children are ready for school with more intensive participation in Parents as Teachers and preschool. Specifically, if children in poverty participated with high intensity in Parents as Teachers and preschool (a minimum of two years in Parents as Teachers and one year in preschool), virtually the same percentage of them (82%) were ready for kindergarten as were their non-poverty peers with no preschool experience or Parents as Teachers participation (81%).

Figure 2. Percentage of Children Scoring Above the Lowest Levels of the Third Grade MAP Communication Arts Test by Poverty Status and Pre-K Experiences



The concept for Parents as Teachers was developed in the 1970s when Missouri educators noted that children were beginning kindergarten with varying levels of learning readiness. With funding from the Missouri Department of Elementary and Secondary Education and the Danforth Foundation, Parents as Teachers began in 1981 in Missouri as a pilot project for first-time parents of newborns. Convinced of the program's benefits and cost effectiveness, the state has offered Parents as Teachers services to all residents through every school district since 1985.

The added value of Parents as Teachers carries over to third grade achievement, particularly for poor children. Again, more intensive participation in both Parents as Teachers and preschool resulted in a similar percentage of poverty children (88%) scoring above the lowest level on the MAP Communication Arts test as non-poverty children with no Parents as Teachers or preschool (93%).

## Parents as Teachers Goals

- Increase parent knowledge of early childhood development and improve parenting practices.
- Provide early detection of developmental delays and health issues.
- Prevent child abuse and neglect.
- Increase children's school readiness and school success.

## The Parents as Teachers *Born to Learn*<sup>™</sup> model includes four components

- Personal visits
- Group meetings
- Screening
- Resource network



### Parents as Teachers national center

2228 Ball Drive  
St. Louis, Mo. 63146  
phone: 314.432.4330  
toll free: 1.866.PAT4YOU  
(1.866.728.4968)  
[www.ParentsAsTeachers.org](http://www.ParentsAsTeachers.org)  
[info@ParentsAsTeachers.org](mailto:info@ParentsAsTeachers.org)

### Funding

This research was supported by a grant to Parents as Teachers National Center from the Ewing Marion Kauffman Foundation. We thank the Missouri Department of Elementary and Secondary Education for authorizing the study and providing the services of the Offices of Social and Economic Data Analysis to match the School Entry files with the MAP files.

### Notes

<sup>1</sup>Pfannenstiel, J. C., & Zigler, E. (2007). Prekindergarten experiences, school readiness and early elementary achievement. Unpublished report prepared for Parents as Teachers National Center.

<sup>2</sup>Snow, C.E., Burns, M., and Griffin, P. (Eds.). (1998). Preventing reading difficulties in young children. Washington, DC: National Academy Press.

<sup>3</sup>Parents as Teachers has a long history of independent research demonstrating effectiveness. For more details, refer to the Parents as Teachers evaluation brochure or our Web site, [www.parentsasteachers.org](http://www.parentsasteachers.org).